

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the Application. Deletions are ~~striketrough~~ and additions are underlined.

Listing of Claims:

1-4 (Canceled)

5. (Previously presented) The medicament of claim 32, where the geranyl geraniol is in the trans isomer form.

6. (Previously presented) The medicament of claim 32, where the geranyl geraniol is one or more cis isomer forms.

7. (Previously presented) The medicament of claim 32, where the geranyl geraniol has a trans-to-cis isomer ratio between 1:100 to 100:1.

8 - 9. (Canceled)

10. (Withdrawn-Previously presented) The method of Claim 38, where the beneficial effect is treatment of at least one malady selected from the group consisting of drug myotoxicity, non-drug myotoxicity, anemia, CoQ10-related syndrome of energetics and CoQ10-related syndrome of LDL protection.

11. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect activates a PPAR.

12. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect down regulates SREBP transcription factors.

13. (Withdrawn-Previously presented) The method of claim 39, where the beneficial effect increases synthesis of CoQ10.
14. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect increases synthesis of CoQ10.
15. (Previously presented) The medicament of claim 5, further comprising CoQ10.
16. (Withdrawn-Previously presented) The method of claim 39, where the beneficial effect decreases triglyceride.
17. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect decreases triglyceride.
18. (Withdrawn-Previously presented) The method of claim 16, where the beneficial effect of the decrease in blood level of the triglyceride has an effect selected from the group consisting of reversal of insulin resistance, metabolic syndrome, prediabetes, diabetes and diabetes-related cardiovascular disease.
19. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect protects against protein loss due to a drug selected from the group consisting of cyclosporine, fibrate, statin, and bisphosphonate.
20. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect is an adjunct to reduce toxic effects of drugs.
21. (Withdrawn-Previously presented) The method of claim 39, where the beneficial effect treats a malady effecting, selected from the group consisting of, insulin resistance, myopathy, GI track, renal insufficiency, organ transplant, an eye, protein wasting, an exercise injury, central nervous system, muscular system, excretory system, skin, protein deficit, blood, and a cancer.

22. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect treats a malady effecting, selected from the group consisting of, insulin resistance, myopathy, GI track, renal insufficiency, organ transplant, an eye, protein wasting, an exercise injury, central nervous system, muscular system, excretory system, skin, protein deficit, blood, and a cancer.

23. (Withdrawn-Previously presented) The method of claim 39, where the beneficial effect increases synthesis of a biochemical factor selected from the group consisting of CoQ10, dolichol, geranyl geraniol-prenylated protein, DL-glycosylated protein, geranyl geraniol-porphyrinated heme, intermediate isoprenoid, distal protein product, and porphyrin.

24. (Withdrawn-Previously presented) The method of claim 38, where the beneficial effect increases synthesis of a biochemical factor selected from the group consisting of CoQ10, dolichol, geranyl geraniol-prenylated protein, DL-glycosylated protein, geranyl geraniol-porphyrinated heme, intermediate isoprenoid, distal protein product, and porphyrin.

25. (Withdrawn-Previously presented) A method to reverse insulin resistance, comprising administering the medicament of Claim 30 and potentiating insulin.

26. (Withdrawn-Previously presented) The method of claim 25, further comprising a beneficial effect of lowering the risk of a disease selected from the group consisting of CVD, T2DM, hypertension, PCOS and fatty liver disease.

27. (Withdrawn-Previously presented) A method to promote GI tract health, comprising administering the medicament of Claim 30 and at least one ingredient selected from the group consisting of a lower GI nutrient, endogenous nutrient, and non-drug vitamin.

28. (Withdrawn-Previously presented) A method to prevent pill esophagitis, comprising administering the medicament of Claim 30 as an excipient in an excipient mix in a pill, selected from the group consisting of compressed tablet, softgel gelatin, hard gel two-piece gelatin, bead, and granule..

29. (Withdrawn-Previously presented) A method to reduce drug toxicities, comprising administering the medicament of Claim 30 and reducing the myotoxicities of a drug selected from the group consisting of statin, cyclosporine, fibrate, and bisphosphonate.

30. (Currently amended) A medicament comprising, an ingestible annatto extract composition from a byproduct solution of Bixa orellana seed components, wherein the annatto extract composition has ~~with a~~ purified geranyl geraniol essentially free of tocotrienols.

31. (Canceled)

32. (Previously presented) The medicament of claim 30, wherein the geranyl geraniol is in both trans and cis isomer forms.

33. (Previously presented) The medicament of claim 7, where the geranyl geraniols have a trans-to-cis isomer ratio between 1:5 to 5:1.

34. (Previously presented) The medicament of claim 7, where the geranyl geraniols have a trans-to-cis isomer ratio is 1:1.

35 - 37. (Canceled)

38. (Withdrawn-Previously presented) A method to produce a beneficial effect comprising administering the medicament of Claim 30 to a mammal in need of a beneficial effect.

39. (Withdrawn-Previously presented) A method to produce a beneficial effect comprising administering the medicament of Claim 35 to a mammal in need of a beneficial effect.

40. (Previously presented) The medicament of claim 30, wherein concentration of the geranyl geraniol in the ingestible composition is greater than 3%.

41. (Previously presented) The medicament of claim 40, wherein concentration of the geranyl geraniol in the ingestible composition is greater than 5%.